

ENVIRONMENTAL EDUCATION IN R. MACEDONIA OBJECTIVES, TENDENCIES, PARADIGMS

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Abstract

In the late nineties of the last century awareness of the international community relied on the understanding of the fact that the real safety of mankind is based only on the communication of humanitarian and environmental safety and that the solution of global environmental crisis can be found only in the sense of having a cultural entity and having respect for all living creatures.

Both during that period and nowadays the idea of equal rights of all living beings in the biosphere and the Earth in general was and is increasingly more obvious. It has become a major impetus for the transition of the philosophy of anthropocentrism into the philosophy of ecocentrism.

Adhering to this philosophy, man is found in the environment of nature. The possibility of life on earth depends on human consequences and God's will. This paradigm does not allow to the universal value of nature to be identified.

The dramatic exchange in the completing our human destiny has been appearing for more than a millennium, as we are becoming mature, global beings, through our great spiritual talent.

Key words: Environmental education, philosophy of anthropocentrism, philosophy of ecocentrism, global mind, global reality, global beings.

ENVIRONMENTAL EDUCATION AND ITS SPECIFIC OBJECTIVES

On the border of two millennia nature has plead its rights ... modern humanity simply cannot neglect the many links that exist between man and the

environment. The goal of Environmental education is to teach everyone how to live in this environment.

Burning coal, oil and various types of gases causes the effect of "greenhouse". The modern arms race hampers environmental problems, preventing the development of many countries. Industry and agriculture pollute the soil, air, rivers and seas. Differences between rich and poor countries are more and more profound. Uncontrolled population growth contributes to the growing need for natural resources worldwide. Acid rain destroys forests and pollutes the water in the oceans. Deforestation causes flooding, reduces the percentage of oxygen in the atmosphere. Deserts occupy fertile soils and absorb them. Developing countries cause new environmental problems on our planet. There are more than one billion people starving. Global environmental crises cover all parts of the world. The Earth turns into a useless desert ... for the first time in history people have visibly changed and transformed their environment. The way people changed external nature suits the way they transformed their internal, psychological, spiritual and moral environment. The destruction of the natural environment is the result of spiritual degradation of man and society as a whole. At the same time, the development of modern science and technology cannot lead humanity to full despair and deep pessimism. Today they help us to solve environmental problems and teach us how to live in harmony with nature. The successful resolution of modern environmental problems cannot be limited in environmental and technological sense. Mankind can overcome global issues through the creation of new moral norms of life, a new philosophy of integration between environment and man with the transformation of ethical norms in nature.

The greatest philosopher of the twentieth century, Albert Schweitzer, who developed the basic principle of universal ethics - the principle of reverence before life-wrote: "I am life that wants to live, in the midst of life that wants to

live..." "For the first time in history the physical survival of the human race depends on a radical change of the human heart." (Erich Fromm, 1976, p. 19).

One of the goals of environmental education is to teach every person to work in the natural environment based on an environmentally responsible choice.

Environmental education based on dialogue of several scientific disciplines links small current actions with their future consequences. In this sense, environmental education is trying to make us feel the continuity of generations and times.

Environmental education can save lives; it can save our planet from total destruction and complete degradation. It can catalyze good changes in the global community. It can be an important factor of human, honest and basic development in foreseeable future. All this depends on the attention being paid to this very important problem of all countries in the world. Success is largely determined by the fact how this problem is perceived and interpreted by the global community.

Environmental education represents safe access to the solution of various problems of training, education and development of children and population as a whole. Environmental education gives us a rather unusual picture of problems of the children education and development by creating different recipes for solving various pedagogical problems. At the same time environmental education has its essential value.

The specific objectives of Environmental education include the formation of diverse experience in the field of activities for nature protection, the creation of technologies and pedagogical methods, and shaping a person's responsible attitude towards the environment. Environmental education cannot develop new models of environmentally responsible behavior of people without criticizing anti-environmental views, values and behaviors that dominate modern society.

In this regard Environmental education is in the position to criticize modern society and its ethical and ideological systems.

Can Environmental education be placed into a widely accepted pedagogical practice or should major changes in the educational system and its paradigms be made? The only answer to this is yes. Modern Environmental education requires significant paradigmatic displacements in philosophy, theory and technique of school education.

In our research we try to use the term "Environmental education" treating it as a reliable, common approach in establishing students' responsible behavior towards nature and ecological culture as a whole in all school subjects.

An important factor of environmental education is the school which conducts education in close contact with families, media, NGOs and social environment as a whole. This approach to some extent overcomes the knowledge and skills as the ultimate goals of education. We think that knowledge and skills are the only terms that are necessary for the development of children's psychological resources necessary for the establishment of an individual's responsible behavior towards nature.

Environmental education in the broadest sense of the word undoubtedly has great significance for the development of both children and the environment.

The importance of Environmental education for the development of children lies in mastering ideas, environmental and morally environmental understanding, practical skills, environmental culture and opinion. It is obvious that systematic thinking is the most important thing in solving environmental problems.

The importance of Environmental education lies in the fact that ethical ideas, values and behaviors are passed on to the environment, promoting its reliable, diverse and basic development. Today, an extremely important issue emerged in all countries in the world. It is the creation of a new methodology of

Environmental education that allows exploring different models of environmentally responsible choice of different hierarchical levels of living systems: from local to global, from one individual to the planet as a whole. The basis for this methodology may lie in some fundamental ethical values common to all people.

Environmental education is an extremely important, social, economic, pedagogical and humanitarian problem. In fact, Environmental education alone cannot eliminate modern environmental problems. There are many other factors - political, economic, social and cultural, which often provide a more direct impact on the relationship between man and environment. However, as the whole population is concerned with education and oriented towards future, education really plays a very important role opening to young people a wide picture of views, including relations between man, society and nature. This education allows students to find their place in this wide set of behaviors and to understand how they can become active participants in history, not just passive victims of global environmental disaster that is coming. Environmental education gives young people an incentive to act and to refrain from ecological fatalism.

Environmental education is a more specific, general access to the entire system of education, rather than a new discipline.

PRINCIPLES AND POTENTIALS OF ENVIRONMENTAL EDUCATION

Environmental education may have the potential to save the Earth or it may not have it. It may be at the heart of a fundamental change in world societies towards a more patient and peaceful world or may not be. All this can greatly depend on the place Environmental education occupies in all societies and on the form it has. After all, this depends on how Environmental education is perceived and understood.

Environmental education has broad access to education. Its defense and paradoxical nature have always been its strong and weak sides. Environmental education has never found it easy to deal with the traditional models of the educational system and institutions. Environmental education is an instrument for achieving a more patient world.

The first foundations of Environmental education were laid by Sir Patrick Geddes, a Scottish professor of botany. By many writers Geddes (1854-1933) is recognized as the "father of environmental education." He was probably the first scientist who made the vital connection, now essential for environmental education, between the quality of environment and quality of education. His Outlook Tower, a tower which still exists in Edinburgh, can be recognized as the first center of this field of study. Here Geddes introduces a number of recovered techniques and ideas that predicted the achievements of modern Environmental education by including the natural environment and learning through activity, interdisciplinary and education for "a person as a whole."

According to Disinger (1983) the first who used the expression was Thomas Pricard at the meeting of International Union for Conservation of Nature and Natural Resources in Paris, 1948. In 1970 in Nevada, USA, a conference was held on "environmental education in the school curriculum." At this meeting, the first widely accepted definition of environmental education was established as:

"A process of recognizing values and classifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture and his biophysical surroundings." (IUCN, 1970).

The environmental education can be seen as a key part in improving the use and care for environmental education and achieving changes towards acceptable societies, locally and globally. There were several attempts to define "environmental education" that were close to this.

The final definition is perhaps impossible to be accepted by all, finding a middle position which, in the opinion of many, can help in deciding the fate of people and of the planet. The prescribed definition, furthermore, may be undesirable if it eliminates the potential, the vision or the scope of Environmental education.

Education for the environment:

- is a lifelong process;
- is interdisciplinary and expanded in the nature of its application;
- is an access to education more as a whole than as an object;
- takes care of the connection and the relationship between man and natural systems;
- monitors the environment to the fullest including social, political, economic, technological, moral, aesthetic and spiritual aspects;
- recognizes both energy and material resources as current and limited opportunities;
- emphasizes the active responsibility;
- exploits a wide range of educational and scientific techniques using practical activities and first-hand experience;
- ranges from local to global dimensions, in the past, present and future;
- should be strengthened and supported by the organization and structure of the teaching-scientific institution as a whole;
- encourages the development of skills for sensitivity, awareness, understanding, critical thinking and skills for solving problems;
- encourages the classification of values and the development of values sensitive in the particular environment;
- Deals with shaping the ethics of the environment.

Beside the proposed principles, we are also showing the following three objectives of Environmental education:

1. To facilitate a clear understanding and concern for the economic, social, political and
2. Environmental dependency in urban and rural areas.

To provide opportunities for acquiring knowledge, values, attitudes, skills and responsibilities for protecting and improving the environment.

To create new patterns of individuals, groups and society as a whole in relation to the environment.

PARADIGMATIC CHANGES IN THE MODERN ENVIRONMENTAL EDUCATION

By the end of the nineties of the XX century the awareness of the international community relied on the understanding of the fact that real security of mankind is based only on the communication of humanitarian and environmental safety and that the solution of global environmental crisis can be found only in the sense of having a cultural entity and have respect for all living beings

In the same period the idea of equality of all living beings in the biosphere and on Earth as a whole became apparent. The fact that the philosophy of anthropocentrism has grown into the philosophy of eco-centrism has become a big boost for the transition.

Joining this philosophy man is in natural environment. Proper use of several natural resources means protection of a healthy environment; the possibility of life on earth depends on the human consequences and God's will.

This paradigm does not allow us to perceive the universal value of nature. It views nature primarily as a reliable, real reason for different sources of knowledge in human life.

The anthropocentric paradigm restricts creative thinking, narrows the field of environmental ideas that are ethically applicable. It complicates the achievements of true interdisciplinary of the educational environment

In general terms, ecocentric paradigm opens up great opportunities for the theory and practice of environmental education, providing good conditions for creating new ethical and moral attitudes towards the environment. This paradigm allows to investigate and analyze environmental education as a complete system (objectives << principles << content << methods << ways), which is an important condition for effective environmental education.

On the border between the anthropocentric and ecocentric paradigm lies an unusual reconciliation paradigm which borrows a safe and necessary foundation from both the paradigms mentioned above. It reflects the consequences of the philosophy of anthropocentrism onto the philosophy of ecocentrism.

Table 1: Essence of the anthropocentric and ecocentric paradigm

Anthropocentric paradigm	Ecocentric paradigm
It puts man and his various material and spiritual need in the center of nature	It equally acknowledges the ecological values of all living beings.
It claims that the Earth is only man's natural environment.	It claims that the Earth is common home to all living beings.
It confirms the administrative approach and protection of the environment.	It confirms the ecological approach to understanding of the environment as a system of natural and cultural-historical interaction.
It propagates that competent requirements of scientific knowledge, modern technology and administrative decisions are a sufficient solution to modern environmental problems.	It propagates environmentally acceptable technology, self-respect, local control – it simply recognizes nature's rules.
It argues that the modern market regulation and political mechanisms are sufficient for solving the ecological crisis, and it proves that economic growth must inevitably soften the modern ecological crisis.	It claims that the environment and sustainable development are a uniform problem; it declares the advantage of qualitative development over quantitative increase.
It aims to support equal standards, norms and criteria in personal and public awareness.	It aims to support variable standards, norms and criteria in personal and public awareness.
Supports unified content, forms and methods of environmental education.	Supports various content, , forms and methods of environmental education.
It is characterized by fragmental and disconnected forms and methods of education.	It is characterized by system and continuity of forms and methods of education.
Supports rivalry and competition.	Supports mutual assistance and cooperation.

It is characterized by total reliance on proven principles and operating instructions.	It is characterized by relative independence from the recognized and proven principles and operating instructions.
It interferes with self-management, self-development, self-evaluation, and self-preservation of a person.	It promotes self-preservation, self-development, self-evaluation, and other factors of a person's self-preservation.
It forms a narrow pragmatic point of the way of consideration of environment and development problems.	It forms a broad ethically oriented point of the way of consideration of environment and development problems.

The ecocentric paradigm does not develop in isolation from the wider social, economic and cultural - historical transformation; it considers parts of broad social change, parts of the development of modern humanism, environmentalism and environmental ethics.

Table 2: Basic attributes of environmental education based on anthropocentric and ecocentric paradigm

Anthropocentric paradigm	Ecocentric paradigm
The goal is the formulation of science and skills	The objective is the development of personality
It is based on the theory of traditional education	It is based on the theory of the development of teaching
Didactic lecture is controlled by the teacher	Teaching is based on cooperation and respect of the person
Distribution of academic explanatory lecture.	Prevalence of the problem for teaching, research technology in the natural environment
Narrow range of styles, methods and teaching doctrine	Wide range of styles, methods and teaching doctrine
The content of education is limited by the programs	The content of education is supplied with so-called informal components and it includes ethical values
Explanatory teaching about society and nature avoiding problem questions, not concentrating on local environmental problems	Teleological learning about environmental issues in the local community, natural and global levels, consideration of political and economic problems being researched with personal choice and responsibility

The claim of the ecological paradigm with wider public awareness and public practice is absolutely impossible without changes in the philosophy and methodology of modern education. The eco-centric paradigm is based on a

system of understanding of nature and personality and it does not deny the importance of scientific knowledge.

Of course, environmental education is an angled stone for solving modern environmental problems and also one of the most important prerequisites for acceptable understanding of the world. But the main problem is in the concentration of basic values and not to overestimate the importance of technology and tools.

Summary

Today environmental education is understood to be:

Education *about* the environment (building awareness, understanding and skills necessary to obtain this understanding);

Education *in* (or from) the environment (where learning occurs in nature, outside of the classroom) and **Education *for* the environment** (the ultimate goal being conservation and sustainable development).

Early international consensus regarding the goal of environmental education *for* the environment was expressed in the 1975 Belgrade Charter adopted by the International Workshop on Environmental Education.

"The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones."

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